

DELAWARE COMPENSATION RATING BUREAU, INC

Review of Experience Rating Plan Parameters

Page 20.1 contains Collectible Premium Ratios.

Page 20.2 contains Expected Loss Cost Factors. They are applied to residual market rates by classification to produce Table A, Expected Loss Factors, which are the basis for the calculation of Expected Losses.

Page 20.3 contains the derivation of various factors, i.e., maximum single loss size, self-rating point, that are used to produce Table B.

COLLECTIBLE PREMIUM RATIOS *

Manual Years 2007 to 2009 Unit Data

Manual Year	Premium at Manual Rates	Collected Premium (Excluding Constants)	Collectible Premium Ratio (2)/(3)
(1)	(2)	(3)	(4)
ALL INDUSTRIES			
2007	323,903,637	346,762,168	0.9341
2008	241,689,434	278,995,736	0.8663
2009	179,947,692	211,766,832	0.8497
TOTAL	745,540,763	837,524,736	0.8902
SELECTED			0.8591
MANUFACTURING AND UTILITIES			
2007	47,974,285	50,392,102	0.9520
2008	33,578,592	38,695,648	0.8678
2009	25,852,612	29,579,187	0.8740
TOTAL	107,405,489	118,666,937	0.9051
SELECTED			0.8705
CONTRACTING AND QUARRYING			
2007	69,379,080	69,427,462	0.9993
2008	49,120,610	51,329,481	0.9570
2009	34,649,300	36,955,731	0.9376
TOTAL	153,148,990	157,712,674	0.9711
SELECTED			0.9489
OTHER INDUSTRIES			
2007	206,550,272	226,942,604	0.9101
2008	158,990,232	188,970,607	0.8413
2009	119,445,780	145,231,914	0.8224
TOTAL	484,986,284	561,145,125	0.8643
SELECTED			0.8331

* Excludes classifications and coverages not subject to experience rating.

CALCULATION OF EXPECTED LOSS RATE FACTORS

Policy Year Beginning 12/1 (1)	Average Law Multiplier (2)	Adjustment Factor (3)	Loss Ratio Development Factor (4)	Expense Allowance ** 1 / (PLR/CPR) (5)	Trend Factor (6)	Product (2) * (3) * (4) *(5) * (6) (7)	Expected Loss Rate Factor 1.0 / (7) (8)	Factor to Reflect Approved Rate Levels * (9)	Adjusted Expected LC Factors (8)*(9) (10)
<u>Manufacturing and Utilities</u>									
2008	0.9579	1.0000	1.7534	1.5211	1.4044	3.5880	0.2787	1.2061	0.3361
2009	0.9711	1.0000	2.0397	1.5211	1.2886	3.8825	0.2576	1.2061	0.3107
2010	0.9848	1.0000	2.7897	1.5211	1.1831	4.9441	0.2023	1.2061	0.2440
<u>Contracting and Quarrying</u>									
2008	0.9579	1.0000	1.8255	1.6580	1.4044	4.0717	0.2456	1.2061	0.2962
2009	0.9711	1.0000	2.1888	1.6580	1.2886	4.5412	0.2202	1.2061	0.2656
2010	0.9848	1.0000	3.0936	1.6580	1.1831	5.9761	0.1673	1.2061	0.2018
<u>Other Industries</u>									
2008	0.9579	1.0000	1.8153	1.4557	1.4044	3.5549	0.2813	1.2061	0.3393
2009	0.9711	1.0000	2.0796	1.4557	1.2886	3.7882	0.2640	1.2061	0.3184
2010	0.9848	1.0000	2.8354	1.4557	1.1831	4.8090	0.2079	1.2061	0.2507

* (12/1/12 Final Indicated Change in Manual Rate Level)/(12/1/12 Approved Indicated Change in Manual Rate Level) by Industry Group, from Page 1.

** Permissible Loss Ratio = 0.5723
 Collectible Premium Ratios
 Manufacturing = 0.8705
 Contracting = 0.9489
 All Other = 0.8331

Experience Rating Plan Parameters

(1)	Eligibility Point = (3,161 = 1 yr Prem) 3 yr =	\$9,483
(2)	Permissible Loss Ratio =	0.6662 (a)
(3)	Expected Losses needed to achieve 5% credibility (1)*(2) = \$9,483*0.6662 =	\$6,318
(4)	Max Value : $\frac{0.25 * \$6,318}{0.05} =$	\$31,590
(5)	K-Value a) If (3) is assigned 5% credibility, then $K = \frac{E(1-c)}{c} = \frac{\$6,318 * (1-.05)}{.05} =$	\$120,042
(6)	.055 Credibility Interval - the .0525 left endpoint corresponds to $E = \frac{(K * C)}{(1-C)} = \frac{120,042 * .0525}{.9475} =$	\$6,651
(7)	Right endpoint for .05 credibility interval =	\$6,650
(8)	Self rating point = 25 * average serious claim = 25 * 310,967 =	\$7,774,175
	6% of (8) rounded to the nearest \$1,000 =	466,000
	Selected =	466,000

(a) Standard LR / CPR = Manual LR
0.5723/0.8591 = 0.6662